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Applicant:	**Cheng, Li-Ming**
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APPEALLANT'S APPEAL BRIEF UNDER 37 CFR § 41.37

This Brief, follows these papers:

- Notice of Panel Decision from Pre-Appeal Brief Review, dated December 20, 2007
- Notice of Non-Compliant Brief, dated March 21, August 5, 2008
- Revised Final Office Action, dated June 13, 2008

This Brief is filed concurrently with a renewed Notice of Appeal, because the Office has re-opened prosecution by mailing a revised Final Office Action. No extension of time is believed due. The Office is authorized to charge any additional necessary fee to Deposit Account No. 50-3856.

In addition, payment of $510 to cover the cost of filing the Opening Brief for a large entity as required under 37 CFR § 41.20(b)(2) is not attached because such fee was previously paid on March 06, 2008. If any additional fee is required and is not submitted via EFS, the Office is authorized to charge the necessary fee to Deposit Account No. 50-3856.

This Brief contains the amended portion of sections III and V, previously submitted on April 07, 2008. This Brief contains the following items under the headings in the order here indicated:

I. Real Party in Interest

II. Related Appeals and Interferences

III. Status of Claims

IV. Status of Amendments

V. Summary of Claimed Subject Matter

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VII. Argument

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I. Real Party in Interest

The real party in interest is Zipshade Industrial (B.V.I.) Corp., the assignee of record.

II. Related Appeals and Interferences

None

III. Status of Claims

Claims 1-49 Cancelled (not on appeal)

Claims 50-55 Rejected (on appeal)

Claims 56, 57 Objected to (not on appeal)

Claim 58 Rejected (on appeal)

Claims 59, 60 Rejected (not on appeal)

Claims 61-65 Rejected (on appeal)

Claim 66 Objected to (not on appeal)

Claims 67-69 Rejected (Final Office Action indicates these claims as rejected, but fails to discuss the ground to which these claims were rejected on. The appellant assumes this was a clerical error and that the Final Office Action meant to reject these claims base on 35 U.S.C. 103 using the same cited references.) (on appeal)

Claims 70-73 Rejected (on appeal)

Again, those claims that are on appeal are claims 50-55, 58, 61-65, and 67-73.

IV. Status of Amendments

Amendments to the claims and the specification were filed on October 31, 2007, after Final Office Action was issued. That amendment was not entered. Section VIII recites the claims as rejected in the Final Office Action dated September 25, 2007.

V. Summary of Claimed Subject Matter

There are four independent claims, claims 50, 62, 67, and 70. There are no mean plus function and step plus function limitations. Dependent claims 65, 71, 72, and 73 are argued separately.

Independent claim 50 refers to a collapsible window covering (e.g., window blinds) capable of height adjustments. An embodiment of this can be found described on page 11 and figure 1. There, a window blind has an upper elongated support (11 in fig. 1, page 11, line 7) with a channel (12 in fig. 1) on the inside (page 11, line 8). Extending downward from the upper elongated support (11) is a collapsible member (e.g., pleats 16 in fig. 1, page 11, line 14). At the bottom of the window blind is a lower elongated member (13 in fig. 1, page 11, line 11). In this window blind system there are at least one primary line used to suspend the blinds. The primary line (20 in fig. 1, page 12, line 1) couples to the lower elongated member (13 in fig. 1) and extends through the pleats (16 in fig. 1). The first primary line (20) continues to extend into the channel (12) of the upper elongated support (11), and couples a secondary line (24 in fig. 7, page 12, line 9). This secondary line leads into a counterbalancing mechanism (see structure circled in fig. 1, and all of fig. 10; described on all of page 13 regarding means 30). The counterbalancing mechanism has two rotary members (see 34 and 35 in fig. 10; page 13, line 17). The counterbalancing mechanism (30) has a spring (32 in fig. 8; page 13, line 16) coupled

to one (34) of the two rotary members so as to urge the other rotary member (35) to rotate in a winding direction to wind and store the secondary line (24 in fig. 7) onto one of the rotary members (see page 13, lines 16-20).

Working together in the channel (12) with the counterbalancing mechanism (30) is a pulley assembly (see figs. 2 and 7; page 16, lines 3-5). The pulley assembly has at least two rotors (50, 51 in fig. 7). The primary line (20 in fig. 7) is entrained about the two rotors (50 and 51).

In operation, the spring (32 in fig. 6) in the counterbalancing mechanism provides suspension force to suspend the lower elongated member (13) in various different heights. The pulley assembly stores primary and secondary lines and makes adjustment of window blinds more accurately.

As for independent claim 62, it is about a method of raising a window covering (e.g., window blind) without using a manual pull cord (see lines 10-13, page 11) by first having a collapsible window covering (e.g., window blind) having an upper elongated support (11), and a collapsible member (e.g., pleats) coupled to the upper elongated support. An embodiment of this method is described in lines 6 to 25 on page 12. At the bottom of the collapsible member (16) is coupled a lower elongated member (part 13, see figure 1, and line 20 of page 12). There are at least two primary lines coupled to the lower elongated member and they extend through the collapsible covering to reach into a channel (12) of the upper elongated support (11, see figure 1). The two primary lines are coupled to a secondary line, this secondary line is then coupled to a counterbalancing mechanism (30) found in the channel (lines 14, 15, page 12). In the channel there is also a pulley assembly (see figures 2 and 3) which has at least two rotors (50-53 in figure 3). At least one of the two primary lines is entrained about the two rotors (figure 3 shows one primary line entrained about the rotors, while figure 4 shows the other primary line entrained about the rotors. Please also see lines 3 to 10 on page 16). The counterbalancing mechanism (30, referred to as "means" on line 1, page 13) has a spring (32 in fig. 6) and two rotary members (34, 35 in fig. 7). The spring couples to a first rotary member which urges the first rotary member to rotate in a winding direction to wind and store the secondary line onto the first rotary member (lines 20-26, page 15; lines 1-2, page 16).

The method further requires that a user manually lift the lower elongated member in an upward direction to allow the collapsible member (e.g., pleats) to shorten (lines 22-25, page 12. The method further requires that, during lifting of the lower elongated member (13), the two primary lines to move evenly without entangling with each other on the first rotary member (this can be achieved by using a single secondary line 24 to pull two primary lines 20, 21, as illustrated in figure 7; this way, the two primary lines 20, 21 moves evenly and are not entangled on the first rotary member 34.)

As for independent claim 67, it refers to a window covering system that has an upper elongated (11) support, a collapsible member (e.g., pleats 16), a lower elongated member (13), at least two primary lines (20, 21) coupled to the lower elongated member and extends through the collapsible member (see lines 4-15, page 11, and figures 1, 2, and 7).

Within the channel (12) of the upper elongated support (11) is a counterbalancing mechanism (30) that has at least two rotary members (34, 35 in fig. 2; see also line 1-6, page 13, counterbalancing mechanism is referred to as "means"). A secondary line (24 in fig. 7) has an end leading into the counterbalancing mechanism (30). This counterbalancing mechanism has at least one s-shaped spring (32 in fig. 6; lines 16-20, page 13) coupled to a rotary member to urge the rotary member to rotate in a winding direction to wind and store the secondary line onto the rotary member.

Within the channel (12) is also a pulley assembly having at least four rotors, the two primary lines are entrained about at least two of these four rotors (figure 3 shows one primary line entrained about the rotors, while figure 4 shows the other primary line entrained about the rotors. Please also see lines 3 to 10 on page 16). .

As for independent claim 70, it refers to a cordless window covering system that has an upper elongated support (11), a lower elongated member (13), a collapsible window covering member (e.g., pleats 16), a spring motor (circled in fig. 1) capable of providing counterbalancing force to counterbalance a weight of the lower elongated member (see lines 4-15, page 11, and figures 1, 2, and 7). The system also have at least two lifting cords (20, 21 in fig. 1) each coupled to the lower elongated member (13), and each passes through the collapsible window covering member (e.g., pleats 60) and into a channel (12) of the upper elongated support (11). Eventually,

the lifting cords are coupled to the spring motor (as illustrated by figure 2, cords 20 and 21 eventually couple to the spring motor comprised of rotary members 34 and 35).

The system also has a pulley assembly with a plurality of pulley rotors aligned consecutively in the channel (as illustrated by figures 2, 3, 4, 7 and 9. See also lines 14-26, page 18). Each of the at least two lifting cords entrain about the group of pulley rotors in a circuitous fashion (as shown in figures 17 and 18) such that each of the two lifting cords repeatedly entrains about the group at least two laps (for example, in figure 17, lifting cord 104 goes around the group of rotors 1-5 in laps before exiting downwards).

As for dependent claim 65, the method requires a counterbalancing mechanism having at least two rotary members (see 34, 35 in figure 7), both of which are capable of entraining a secondary line (part 24, figure 7).

As for dependent claim 71, the claimed device requires that at least two lifting cords (104, 105 in figure 17) are stored on a group of pulley rotors (rotors 1-3, 5 in figure 17) in a circuitous fashion. Each of the least two lifting cords entrain about the second pulley rotors (e.g., rotor 5 in figure 17) at least twice.

As for dependent claim 72, wherein the first pulley rotor (rotor 1 in figure 17) is disposed at one terminal end of the group of pulley rotors, and the second pulley rotor (rotor 5 in figure 17) are disposed at an opposite terminal end of the group of pulley rotors. The rotors in figure 17 are arranged in a consecutive alignment, linear aligned one after another. These rotors align in a substantially straight line.

As for dependent claim 73, similar to claim 72, the at least two lifting cords are described to entrain about the group of rotors at least three laps. Also, the at least two lifting cords are coupled to the spring motor via at least one connecting cord (107 in figure 17).

VI. Grounds of Rejection to be Reviewed on Appeal

Whether claims 50-55, 58, 61-65, 67-73 are unpatentable under 35 U.S.C. § 103 over Gertzon in view of Kuhar '100, when substantial secondary indicia of non-obviousness is present in the record.

Whether claims 70-73 are unpatentable under 35 U.S.C. § 112, first paragraph, as being indefinite.

VII. Argument

REJECTION UNDER 35 U.S.C. 103(B) AS BEING OBVIOUS OVER GERTZON IN VIEW OF KUHAR '100

This ground of rejection was applied to more than one claim. The appellant hereby argues the claims separately and in groups, as follows:

1. Claims 50-51, 62, 63, 67-69
2. Claims 52-55, 58, 64
3. Claim 61
4. Claim 65
5. Claim 70
6. Claim 71
7. Claim 72
8. Claim 73

The appellant respectfully requests that the Board consider the patentability of the grouped claims separately (eight groups).

In addition, because some of the arguments for each of the above eight groups are the same, the appellant wishes to present these generic arguments at once instead of repeating the same arguments under each of the eight groups' sub-headings. It is to be noted that the following generic arguments apply to each of the eight groups above. It is to be further noted that these arguments are presented together for efficiency purpose only, and it shall not be considered arguing as one single large group as a whole. Again, the appellant respectfully requests that the Board consider the patentability of the eight groups separately.

After the generic arguments are presented, each of the eight groups is separately argued under its own sub-heading.

GENERIC ARGUMENTS (applying to all eight groups as listed above)

Claims in all eight groups above were rejected under 35 U.S.C. § 103(a) as being unpatentable over Gertzon (2,594,637) in view of Kuhar (5,482,100). The appellant respectfully disagrees.

A. **The Office Erred by Failing to Consider the Totality of the Evidence**

The Office erred in failing to consider a totality of the evidence in determining the patentability of the claims. Instead, in its Final Office Action, the Office merely continued its obviousness rejection from previous Office Actions without considering new evidence presented by 1.132 Declarations.

When an applicant submits evidence traversing a rejection, the examiner is required to make a fresh consideration of all of the evidence (including evidence cited by the examiner and the evidence submitted by the applicant). A decision to continue a rejection in the face of all the evidence must show that it was based upon the consideration of all the evidence. It is insufficient to merely state that the Declarations are insufficient to rebut the prima facie case. Rather, the office action should state that the conclusion of unpatentability was based upon the totality of the evidence. *In re Piasecki*, 223 USPQ 785 (Fed. Cir. 1984); *In re Semaker*, 217 USPQ 1 (Fed. Cir. 1983). MPEP 716.01(b).

The appellant previously submitted Declarations presenting secondary indicia of non-obviousness, including evidence of unexpected result, teaching away, commercial success, copying of others, failure of others, unmet needs, among others. When addressing these Declarations, the Office attacked each Declaration individually in a piecemeal fashion. The Office erred by failing to consider all of the evidence as a whole, against prima facie evidence of obviousness. The court in *Graham v. John Deere Co.*, (383 U.S. 1, 86 S. Ct. 684, 15 L.Ed. 2d 545 (1966)) stated that "the inference of obviousness drawn from the prior art disclosure is only prima facie justification for drawing the ultimate legal conclusion that the claimed invention is unpatentable under 35 U.S.C. section 103, it is imperative that such secondary considerations also be evaluated in determining the final validity of that legal conclusion."

The Declaration of co-inventor Li-Ming Cheng demonstrates the following:

- Unmet need: Known cordless shades were offered in the made-to-measure market, no cordless shades were available to general consumers. At that time, retailers were looking for the perfect cordless shade to carry in their stores and catalogues.
- Unexpected result: Features of the claimed invention miniaturized head rail, lowered manufacturing cost, provided more precise adjustment, and is light-weight.
- Commercial success: The claims product expanded company market share without significant changes in marketing expenditure/plan. The claimed product replaced competing products in the market place.
- Copying of others: At least two companies are selling the claimed invention, one of them is the former sole distributor of the claimed product for appellant.

The Declaration of Theodor Crous Swart (Marketing manager of appellant's company) demonstrates the following:

- Commercial success: The claimed product was the first cordless shade of its kind to be carried by the JCPenney catalogue.
- Commercial success: The claimed product caused increased invitations from larger retailers to participate in new shade programs.
- Commercial success: The claimed product expanded business relationship of appellant to additional large U.S. retailers.
- Commercial success: Annual sales of the claimed product drastically increased despite same level of marketing expense.
- Commercial success: Through the claimed product, appellant company has gained recognition in the industry.
- Commercial success: Through the claimed product, appellant company successfully entered into markets for high quality shades. This market was not previously available to the appellant.

The Declaration of ChingHo Chao (Engineer of the appellant company) demonstrates the following:

- Cordless shades were not available in the general retail market in 2003.
- Known cordless shades in 2003 had problem making precise adjustment.

- In 2003, there was a profitable untapped market in affordable cordless shades that are ready-made, as opposed to customized cordless shades in the made-to-measure market.
- The Kuhar patent contributed to the industry by, in view of industry trend, introducing the idea that a simple, adaptable spring-motor can create a cordless shade with less component parts.

The Declaration of Jerry Zerg (President of United Design Associates, Inc., practicing interior designer, instructor in window treatments) demonstrates the following:

- Teaching Away: Window blind systems having less component parts are known to be advantageous. For decades, the general direction of general consumer window blind design (including after Kuhar's 1996 teaching) has been designing window blinds that are less complicated, with less component parts.

- Teaching Away: Kuhar teaches the importance of creating friction on the cords, which contradicts with the functions of Gertzon's pulley rotors.

- Unexpected Results: Stable alignment, lighter weight, lower manufacturing cost, prolonged cord life, smaller head rail, creating friction through the use of pulley rotors and cords overlaying onto themselves.

The weight to be accorded to the objective evidence or secondary considerations depends on the individual factual circumstances of each case. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); Hybritech, Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 231 USPQ 81 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987). The ultimate determination on patentability is made on the entire record. In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992).

B. The Office Erroneously Required that Secondary Indicia of Non-Obviousness be Recited in the Claims

The law does not require that the Applicant claim Secondary indicia of non-obviousness presented in a Declaration. *In re Merchant*, 197 USPQ 785. However, the Office erroneously

argued in its Final Office Action (dated September 25, 2007) that the desirable characteristics indicated in Mr. Zerg's Declaration is not persuasive because such characteristics are not claimed and would be difficult to claim.

Mr. Zerg's Declaration provides factual and opinion evidence of unexpected results (low costs, lighter weight, fewer component parts), among other secondary indicia of non-obviousness. The law does not require that applicants claim these unexpected results or properties. *In re Merchant*, 197 USPQ 785.

C. The Office Erroneously Argued that a Design that is now in Widespread Use is Further Evidence of Obviousness of such Design

In the Final Office Action, the Office argued that the "desire to alleviate the dangling pull cord of Gertzon is exactly what led to the now widespread use of spring motors and storage spools for the lift cords." The appellant respectfully disagrees. The totality of the evidence supports that it would NOT have been obvious at the time the invention was made to combine Gertzon and Kuhar to result in the claimed invention. The Office should have addressed secondary indicia of non-obviousness presented by the applicant. The Office cannot ignore these evidence by merely definitively stating (without factual support) that a proposed motivation "is exactly what led to the now widespread use of [the design]."

The obviousness test is to consider whether it would have been obvious "at the time the invention was made," not whether a motivation proposed by the Office has led to a design that is "now in widespread use."

In addition, the Office provided no evidence showing a nexus between what is now in widespread use and a proposed motivation. A design that is currently in wide spread use may have originated with the applicant's product, and may have originated from elsewhere but dated later than the applicant's invention date. Simply concluding that the claimed design is "now" in widespread use reveals nothing about whether it would have been obvious to combine the two cited references to achieve the claimed design.

D. The Office Erroneously Discredited Teaching Away references and Evidence Showing that Combinations Suggested by the Office Would Have Destroyed a Primary Reference

The Office erred in its Final Office Action by failing to consider and address specific evidence of teaching away, and evidentiary support for the finding that the combination of Gertzon and Kuhar would have destroyed the Gertzon reference.

The Office also erred in its Final Office Action by stating that if it is true that combination of two references can destroy a primary reference, "any combination of teachings proposed 103 rejections would 'destroy' the primary reference."

The appellant respectfully disagrees with the Office. According to MPEP 2141.02 and 2143.01, prior art must be considered in its entirety, including disclosures that teach away from the claims, and that proposed modification cannot render the prior art unsatisfactory for its intended purpose or change the principle of operation of a reference. Further, it is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983).

The Federal Circuit has indicated that one important indicium of nonobviousness is "teaching away from" the claimed invention by the prior art, and has reversed rejections of claims where it found that prior art references applied by the Patent Office in fact teaching away from what was being claimed. Therefore, an applicant may rebut a prima facie case of obviousness by showing that the prior art teaches away from the claimed invention in any material respect. In re Geisler, 116 F.3d at 1469, 43 USPQ2d at 1365 (quoting In re Malagari, 499 F.2d at 1303, 182 USPQ at 553).

The following is a short summary of evidence provided in Declaration by Jerry Zerg:

- The Kuhar reference teaches away from modifying the Gertzon device as recited in the applicant's claims; Kuhar's objective is simplify needed component parts by replacing all component parts of Gertzon with a spring motor assembly.
- There have been many different types of cordless and corded window blinds in the industry before the Kuhar patent was issued on January 9, 1996. And Kuhar's patent has a main objective of eliminating the disadvantages of the more complex and cumbersome cordless or corded window blind systems of the past, using a simple and easily adaptable mechanism to replace intricate inner components found in previous window blinds (including corded and uncorded window blinds). The Kuhar patent points out the

importance of simplicity, and provides a viable solution in creating a desirable cordless window blind having less component parts.

- The Gertzon patent is a good example of complex and cumbersome window blind with intricate inner components. Such intricate inner components are what the Kuhar patent was intended to replace. In the Gertzon patent, a Venetian blind has a complicated multi-tier pulley wheel set (please see next page for a drawing), guides (36), a manual pull cord, and a cord lock. The multi-tier pulley wheel set and the cord lock has opposite functions. The pulley wheels alleviate friction, while the cord lock creates friction to lock the cord. The pulley wheels (35) are sufficiently spaced apart and located in tiers, and guides (36) are needed to prevent the cord from twisting onto itself. This is a typical pulley system, designed to alleviate unwanted friction during operation, and permits a load to be lifted with less force.
- Combining Gertzon and Kuhar would have destroyed the Gertzon device because one would have removed key components of the Gertzon device: the cord lock, the pulley wheels, and the cord guides. When these key components are removed the Gertzon device is rendered unsatisfactory for its intended purpose, and it would change it's principle of operation.
- There are many prior art references that teach the importance of having less component parts in a window blind (please see Affidavit by Jerry Zerg, submitted July 17, 2007).
- The general trend in the industry was to simplify component parts in a window blind, and Kuhar achieved this objective. One would not have wanted to retain the pulley wheels of Gertzon, when combining Gertzon and Kuhar. One skilled in the art would have simply replaced all inner component parts of Gertzon because that's what was taught in Kuhar and in the prior art.
- Multi-tier pulley wheels and guides of Gertzon are no longer necessary under the objective of Kuhar, and are rather undesirable to have. By replacing all intricate components with a simple spring-motor, the Kuhar patent provides most (if not all) of the desired properties – simplicity, lighter weight, lower manufacturing cost, and less component parts. The spring motor in the Kuhar patent is sufficiently strong to lift the blinds without pulley wheels (35), and the extra component parts and manufacturing steps involved in retaining and assembling the cord, multiple pulley wheels, guides, would make it undesirably costly to manufacture. Retaining such intricate pulley system

would have created no competitive edge in the market place. Any reasonable window blind engineer would have wanted to get rid of the intricate pulley system all together.

While the general combination of the two cited references might have been suggested by the prior art, how individual elements in both references were retained, modified, repositioned, resized, rearranged, or eliminated to result in the imaginary "combined device" may very well have required additional steps of inventive thinking. Especially when the combination required that some individual elements be retained, modified, and eliminated in ways not suggested by the prior art, such combination unquestionably requires additional inventive steps that would not have been obvious.

In looking at Gertzon and Kuhar as a whole, the overall "desirability" to eliminate pull cord is instantly answered by Kuhar's spring motor. Kuhar provides that a spring motor is all that is needed to lift the blinds. In fact, pulleys are discouraged because Kuhar wanted to create friction and tension through lifting cords' direct contact with rough edges such as those indicated by numbers 50 and 56 in Figure 2. It is also believed that the lifting cords also directly scrape against the edges of the bores leading lifting cords out of the head rail. In operation, the Kuhar device as offered in the market place has a large motor using a rather heavy duty spring to lift the weight of the blinds. Because of the rather large motor, a relatively large head rail with sufficient channel space is required to house the motor.

In fulfilling the desirability of eliminating pull cord, the Gertzon device can be modified as taught by Kuhar to become safer, and simpler with few component parts. *The resulting modified device would have been just that: a cordless-blind system that is simple, without pulley wheels.* Again, the prior art teaches away from retaining a pulley system when modifying Gertzon. Kuhar specifically teaches against having a complex system with many component parts.

The Office is also respectfully reminded that proceeding contrary to accepted wisdom in the art is evidence of nonobviousness. *In re Hedges*, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986). Furthermore, "[k]nown disadvantage in old devices which would naturally discourage search for new inventions may be taken into account in determining obviousness." *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966). Here, evidence as previously presented supports that if one were motivated to modify the Gertzon device with the teaching of Kuhar,

one would have eliminated the pulley system in Gertzon all together because Kuhar teaches away from having complicated component parts.

Obvious to Try

The prior art as a whole teaches away from retaining a pulley system. While it might have been obvious for one skilled in the art to "try" different possibilities in retaining, repositioning, and resizing the pulley system, such "obvious to try" standard has been rejected by the courts. *In re Merck & Co., Inc.* 800 F 2d 1091 (C.A. Fed., 1986).

The Office is respectfully reminded that all inventions are combinations of old elements, or rearrangement of old elements in a novel, nonobvious way. Although the claimed invention here involves only relatively simple mechanical concepts, the non-obvious combination of these old elements provided major innovations to the window blinds industry. As the court has pointed out in *In re McLaughlin*, 443 F 2d 1392 (C.C.P.A., 1971), "a patentable invention, within the ambit of 35 U.S.C. section 103, may result even if the inventor has, in effect, merely combined features, old in the art, for their known purpose, without producing anything beyond the result inherent in their use." Quoting *In re Sponnoble*, 56 CCPA 823,405 F. 2d 578, 56 CCPA 823 (1969).

E. The Office Erroneously Discredited Evidence of Commercial Success

As for evidence of commercial success, the Office contended that the success is a result of appellant switching the main product from vinyl roller shades to pleated shades, and that the success is a reflection of the entire market, which made similar shift.

The appellant respectfully disagrees. Evidence presented in the record has adequately established a nexus between the claimed invention and the commercial success. The following is a summary of Declaration presented by Theodor Crous Swart on commercial success:

- Prior to 2004, marketing efforts to expand products to other large retailers were unsuccessful due to lack of innovation in appellant's products.
- When the claimed device was introduced, the appellant was able to get access to JCPenney® (one of North America's largest retailer).

- Previously JCPenney® had been unsuccessful in finding a suitable cordless shade product for their catalogues, and appellant's competitor Whole Space Industries had been unsuccessful in establishing business relationships with JCPenney®.

- Whole Space subsequently acted as appellant's sole agent for JCPenney® and Lowe's® in North America for the claimed device.

- Through the appellant's claimed device Whole Space Industries. was able to establish business relationship with JCPenney®.

- In JCPenney®'s company history, the first ever cordless shade carried in the JCPenney® catalogue was appellant's cordless shade (January, 2004 JCPenney® catalogue).

- Appellant's claimed device was well-received by the market as evidenced by purchase orders from major retailer such as JCPenney®.

- Comparing to pre-2004, appellant has received increased invitations from large U.S. retailers (e.g., Target Corporation®, Home Depot®, Lowe's®) to participate in new shade programs. Invitations increased despite the fact appellant attended less trade shows in the U.S. since 2004.

- The success of appellant's claimed device spawned several competitors (i.e., Whole Space Industries and Ching Feng Home Fashions Company). Whole Space Industries, in particular, used to be appellant's exclusive agent, and has since been selling knock-off versions to JCPenney® (JCPenney® item ID number R282-27744-011). Ching Feng Home Fashion's Company's knock-off version is also being sold by JCPenney®, Home Collection™ item ID number 736-6757-0018.

- During the past two years the product's commercial success continues. Appellant continued to sell the claimed device to additional U.S. retailer including Bed Bath & Beyond®, Walmart®, etc.

- Sales volume of the claimed device increased 12% in 2004, when comparing with previous year's number.

- Sales volume of the claimed device increased 32% in 2005, when comparing with previous year's number.

- Sales volume of the claimed device increased 43% in 2006, when comparing with previous year's number.
- Sales volume increased from 2004 through 2006 despite that fact appellant spent approximately the same amount of money in marketing when comparing with previous years.
- Through the commercial success of the claimed device, the appellant successfully established itself as a well-known player in the U.S. market in cordless solution of high quality shades.
- Through the claimed device, the appellant successfully transitioned from engaging in original equipment manufacturing (OEM), to original design manufacturing (ODM) and original branding manufacturing (OBM). The appellant has since been recognized for its R&D capabilities. Also, shades manufactured by the appellant now bear its own brand.
- Had it not been for the innovative nature and commercial success of the claimed device, companies like JCPenney® would not have wanted to establish business relationship with the appellant.

The commercial advantages of applicant's cordless shade have been recognized in that it has achieved outstanding commercial success in entering into major markets in just a few months.

The court in *Graham v. John Deere Co.*, (383 U.S. 1, 86 S. Ct. 684, 15 L.Ed. 2d 545 (1966)) stated that "the inference of obviousness drawn from the prior art disclosure is only prima facie justification for drawing the ultimate legal conclusion that the claimed invention is unpatentable under 35 U.S.C. section 103, it is imperative that such secondary considerations also be evaluated in determining the final validity of that legal conclusion."

F. The Office Erroneously Discredited Evidence of Unexpected Result as "Hindsight"

The Office erred by failing to consider and address evidence of unexpected result. The Office also erred by dismissing such evidence as hindsight.

The Office contended that the declarants' opinion on whether they would have made such combination constitutes "hindsight." While the appellant agrees that the Examiner may propose a different motivation to combine, these declarations were submitted in part to present unexpected results, and teaching away of Kuhar. These opinions were NOT provided to present ultimate legal conclusions on the issue of obviousness.

- Please see attached 1.132 Affidavit by Jerry Zerg on **unexpected results**.
- Please see attached 1.132 Affidavit by Li-Ming Cheng on **unexpected result.**

The claimed device has many unexpected advantages to resolve issues not previously recognized (or resolved) in the prior art. Examples of these undesirable issues include:

1. The requirement for large springs - Kuhar requires a sufficiently large spring. Kuhar's spring motor needs a heavy duty spring for more stabilized biasing force. Otherwise, when the blind is lowered and raised, and immediately after the user's hand leaves the bottom member, the bottom member would slightly spring back up towards the head rail, or drop slightly towards the ground. Using the specific type of pulley system as claimed eliminates the need for a heavy duty spring. Large springs require a rather unsightly large head rail. In the claims now under appeal, a pulley system allows the use of a smaller gauge spring, head rail can be miniaturized for a more aesthetically appealing look.
2. Heavy duty springs are expensive - One would have thought that adding a pulley system would undesirably increase manufacturing cost (because of added manufacturing steps, cost of material, etc.). Surprisingly, although more complicated, adding the specific type of pulley system as claimed actually decreases manufacturing cost, not raising it.
3. Scraping of lifting cord against bracket reduces usable life - When a cordless blind is lowered and raised, the bottom member slightly springs back up towards the head rail, or it may drop slightly towards the ground. In other words, height adjustment precision has been a problem. Kuhar attempted to address this issue by letting the cords to scrape against bracket 55 or against the rim of bores leading the cords out of the head rail. Kuhar's method decreases usable life of the cords. The instant application solves this issue by using a particular type of pulley

system to create additional friction and tension in the cord (without direct scraping, which damages the cords, like in Kuhar).

The court in *Graham v. John Deere Co.*, (383 U.S. 1, 86 S. Ct. 684, 15 L.Ed. 2d 545 (1966)) stated that "the inference of obviousness drawn from the prior art disclosure is only prima facie justification for drawing the ultimate legal conclusion that the claimed invention is unpatentable under 35 U.S.C. section 103, it is imperative that such secondary considerations also be evaluated in determining the final validity of that legal conclusion."

G. The Office Erred in Failing to Address Specific Arguments and Evidence Presented by the Appellant Regarding Unmet Needs, Copying of Others, and Failure of Others

The Office erred by failing to consider the totality of the evidence. The Office erred by failing to address, in its Final Office Action, secondary indicia of non-obviousness regarding unmet needs and copying of others as discussed above.

The court in *Graham v. John Deere Co.*, (383 U.S. 1, 86 S. Ct. 684, 15 L.Ed. 2d 545 (1966)) stated that "the inference of obviousness drawn from the prior art disclosure is only prima facie justification for drawing the ultimate legal conclusion that the claimed invention is unpatentable under 35 U.S.C. section 103, it is imperative that such secondary considerations also be evaluated in determining the final validity of that legal conclusion."

H. The Office Erred by Essentially Forcing a Comparison of the Invention with Itself

The Office erred by comparing the current claims with Gertzon as modified by Kuhar, without properly considering secondary indicia of non-obviousness. This unfairly resulted in a comparison of the invention with itself. *In re Chapman, 148 USPQ 711.* By not considering secondary indicia of non-obviousness, in particularly teaching away references, the Office improperly created an imaginary prior art device, essentially using the claimed device as a mold. If such secondary indicia of non-obviousness are properly considered, combination of the cited references would have resulted in a completely different imaginary device.

ARGUMENTS FOR INDIVIDUAL GROUPS

In addition to the above generic arguments, which individually and separately apply to each of the eight groups of claims, the following are arguments for each group of claims.

CLAIMS 50-51, 62, 63, 67-69

Claims 50, 51, 62, 63, 67-69 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Gertzon (2,594,637) in view of Kuhar (5,482,100). The Office has erred.

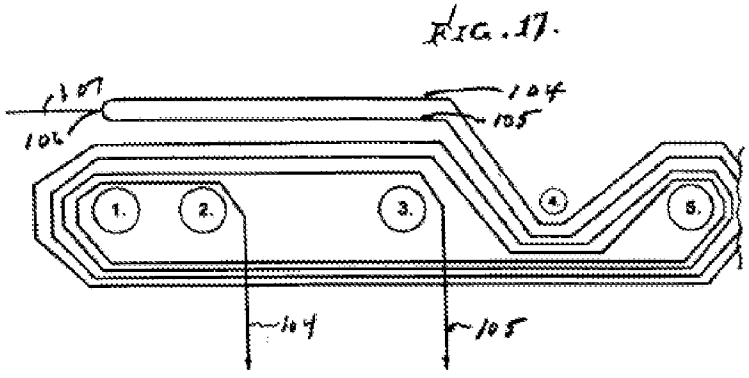
The concept of using pulley in combination with the spring motor is novel and non-obvious. As discussed above, industry trend, cited prior art, and many other publications (see Jerry Zerg Declaration) teaches away from having such combination.

The court has recently indicated that the PTO should apply the principles of *Phillips v. AWH* during prosecution — rather than the PTO's current practice of giving claims their "broadest reasonable interpretation." *In re Johnston* (Fed. Cir. 2006). The Patent Office may use a dictionary in defining the patent applicant's claim terms only when the patent specification did not otherwise provide any interpretation.

CLAIMS 52-55, 58, 64

Claims 52-55, 58 and 64 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Gertzon (2,594,637) in view of Kuhar (5,482,100). The Office has erred.

Prior art of record do not recite or suggest having a first and second rotors in the pulley assembly that is capable of supplementing a counterbalancing effect created by the counterbalancing mechanism (spring motor).



Appellant's Fig. 17

Referring to Figure 17, one purpose of Appellant's roller system is to create friction. This is accomplished by having cords wind on top of themselves. With the added friction

between the cords that disposed on top of each other, blinds are easily held in position, and the system requires less counterbalancing force to suspend the weight of the blinds. The added friction supplements the counterbalancing effect. As a result the added friction prevents the bottom elongated member from bouncing and allows more exact adjustment, which is very important to the appearance and function of a window blind (see Jerry Zerg's opinion evidence in the Jerry Zerg Declaration). For example, when a user wants to completely block out light, he/she will want to be able to easily pull down the blind to provide complete coverage without having to consider how far the blind may bounce back up or down. Also critical in interior design is that adjacent blinds need to have the ability to easily align their height to each other, so that adjacent window blinds can look aligned.

The multi-tier pulley wheel system in the Gertzon patent does not supplement the counterbalancing effect of a spring motor. The below is an illustration of the pulley system of Gertzon.

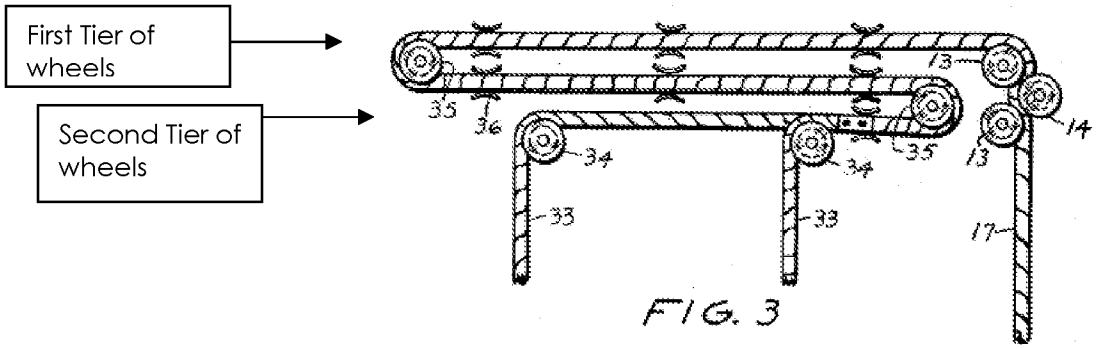


FIG. 3

Multi-tier pulley wheels and guides are used in Gertzon. This type of pulley wheels are designed to eliminate friction, performing a function opposite of the pulley assembly in the claimed device.

Further, multi-tier pulley wheels and guides are rather undesirable to have in view of Kuhar. By replacing all intricate components with a simple spring-motor, the Kuhar patent provides most (if not all) of the desired properties – simplicity, lighter weight, lower manufacturing cost, and less component parts. The spring motor in the Kuhar patent is sufficiently strong to lift the blinds without pulley wheels (35), and the extra component parts and manufacturing steps involved in retaining and assembling the cord, multiple pulley wheels, guides, would make it undesirably costly to manufacture. Retaining such intricate pulley system

would create no competitive edge in the market place. Any reasonable window blind engineer would want to get rid of the intricate pulley system all together (see Jerry Zerg's Declaration).

The court has recently indicated that the PTO should apply the principles of *Phillips v. AWH* during prosecution — rather than the PTO's current practice of giving claims their "broadest reasonable interpretation." *In re Johnston* (Fed. Cir. 2006). The Patent Office may use a dictionary in defining the patent applicant's claim terms only when the patent specification did not otherwise provide any interpretation.

CLAIM 61

The appellant traverses the rejection of claim 61 based on 35 U.S.C. 103. Without agreeing to the propriety of such rejection, the appellant is in favor of helping to expedite the appeal process by canceling claim 61. Entry of this claim cancellation would make this rejection moot.

The court has recently indicated that the PTO should apply the principles of *Phillips v. AWH* during prosecution — rather than the PTO's current practice of giving claims their "broadest reasonable interpretation." *In re Johnston* (Fed. Cir. 2006). The Patent Office may use a dictionary in defining the patent applicant's claim terms only when the patent specification did not otherwise provide any interpretation.

CLAIM 65

Claim 65 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Gertzon (2,594,637) in view of Kuhar (5,482,100). The Office has erred.

Claim 65 requires the counterbalancing mechanism to have two rotary members both of which are capable of entraining a cord. Kuhar teaches a spring motor having two rotary members, only one of which can entrain a cord. This is clearly seen by referring to Kuhar's figure 2 below.

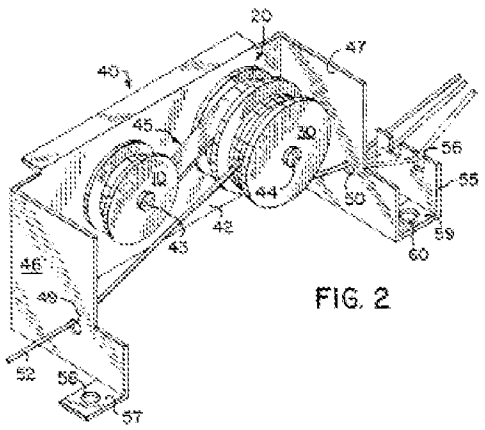


FIG. 2

Fig. 2 of the Kuhar patent

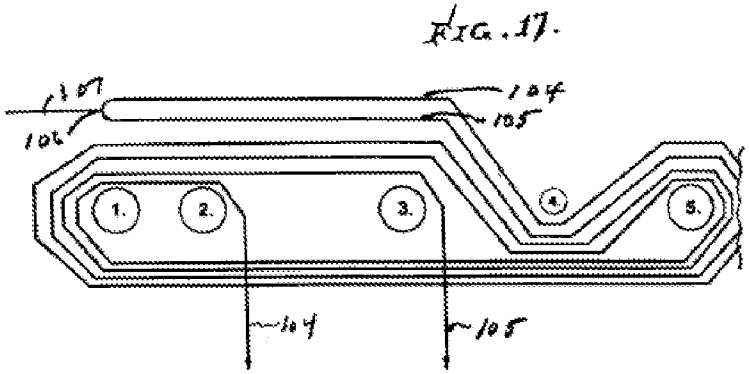
The court has recently indicated that the PTO should apply the principles of *Phillips v. AWH* during prosecution — rather than the PTO's current practice of giving claims their "broadest reasonable interpretation." *In re Johnston* (Fed. Cir. 2006). The Patent Office may use a dictionary in defining the patent applicant's claim terms only when the patent specification did not otherwise provide any interpretation.

CLAIM 70

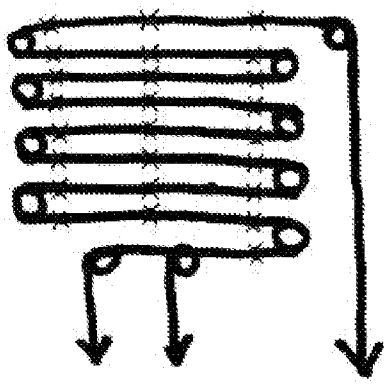
Claim 70 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Gertzon (2,594,637) in view of Kuhar (5,482,100). The Office has erred.

The office erred in finding that "to entrain the cords around rotors numerous times merely duplicates the arrangement in Gertzon," when evidence strongly suggests otherwise. Here are some of elements recited in claim 70 and not taught by the cited prior art references:

- Pulley rotors aligned consecutively
- Lifting cords entrain about a group of pulley rotors in a circuitous fashion
- Lifting cords entrain about a group of pulley rotors in a circuitous fashion at least two laps
- Lifting cords entrain about a first of pulley rotor at least twice



Appellant's Fig. 17



This illustrates what a multi-tier pulley system may look like when it is expanded by adding additional tiers to accommodate a longer cord. Cords are nicely separated by guides so that the cords from each tier does not touch each other, and prevent adjacent cords from twist together. Cords are not entrained on the rotors in a circuitous fashion, and no cord is entrained about a rotor at least twice.

Some example advantages of circuitous entrainment are:

- The rotor set (pulley set) itself can store (or collect) cords
- No additional rotor is needed to accommodate longer cords (whereas the pulley in Gertzon will need more tiers of rotors to accommodate longer cords) The standard drop (length) of today's shade is around 72 inches. Longer drop shades require longer cord. To accommodate a longer cord, Gertzon would need to add more levels (or layers) of pulley rotors to the three levels it already has in Figure 3, making its head rail even bulkier.
- Head rail can be miniaturized because only a minimum number of pulley rotors are needed to accommodate different lengths of cords
- Head rail can be miniaturized because the rotors are linearly aligned, instead of in levels (as shown in Fig. 3 of Gertzon)

- Head rail can be miniaturized because spring-motor no longer requires a relatively large storage spool, since the pulley rotors share the burden of storing cords

The court has recently indicated that the PTO should apply the principles of *Phillips v. AWH* during prosecution — rather than the PTO's current practice of giving claims their "broadest reasonable interpretation." *In re Johnston* (Fed. Cir. 2006). The Patent Office may use a dictionary in defining the patent applicant's claim terms only when the patent specification did not otherwise provide any interpretation.

CLAIM 71

Claim 71 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Gertzon (2,594,637) in view of Kuhar (5,482,100). The Office has erred.

Claim 71 requires that the lifting cords entrain about at least two pulley rotors at least twice. The cited prior art references do not teach this limitation.

The court has recently indicated that the PTO should apply the principles of *Phillips v. AWH* during prosecution — rather than the PTO's current practice of giving claims their "broadest reasonable interpretation." *In re Johnston* (Fed. Cir. 2006). The Patent Office may use a dictionary in defining the patent applicant's claim terms only when the patent specification did not otherwise provide any interpretation.

CLAIM 72

Claim 72 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Gertzon (2,594,637) in view of Kuhar (5,482,100). The Office has erred.

Claim 72 requires that the two pulley rotors (both of which the lifting cords entrain about at least twice) are disposed at opposite terminal ends of a linear alignment (in substantially straight line) of pulley rotors. The cited prior art references do not teach this limitation.

The court has recently indicated that the PTO should apply the principles of *Phillips v. AWH* during prosecution — rather than the PTO's current practice of giving claims their "broadest reasonable interpretation." *In re Johnston* (Fed. Cir. 2006). The Patent Office may

use a dictionary in defining the patent applicant's claim terms only when the patent specification did not otherwise provide any interpretation.

CLAIM 73

Claim 73 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Gertzon (2,594,637) in view of Kuhar (5,482,100). The Office has erred.

Claim 73 requires that the two lifting cords entrain about the group of pulley rotors at least three laps. The cited prior art references do not teach this limitation.

The court has recently indicated that the PTO should apply the principles of *Phillips v. AWH* during prosecution — rather than the PTO's current practice of giving claims their "broadest reasonable interpretation." *In re Johnston* (Fed. Cir. 2006). The Patent Office may use a dictionary in defining the patent applicant's claim terms only when the patent specification did not otherwise provide any interpretation.

REJECTION UNDER 35 U.S.C. 112 AS BEING INDEFINITE

Claim 70-73

The Final Office Action dated September 25, 2007 rejected claims 70-73 for minor formality errors. Applicant submitted on October 31, 2007 proposed amendment in the Response to Final Office Action to repair these deficiencies. This amendment was not entered. No new matter would be entered. Below is a list of claims 70-73 showing the amendment proposed on October 31, 2007:

70. (Currently Amended) A cordless window covering system, comprising:

an upper elongated support having a longitudinal channel;

a lower elongated member;

a collapsible window covering member coupled to said lower elongated member;

a spring motor disposed at a terminal end in the channel and is capable of providing counterbalancing force to counterbalance a weight of the lower elongated member and a weight of the collapsible window covering member, at various heights of the lower elongated member;

at least two lifting cords each having a distal end coupled to the lower elongated member, and each of said lifting cords passes through the collapsible window covering member and into the channel, and the lifting cords are coupled to the spring motor;

a pulley assembly having a plurality of pulley rotors aligned consecutively <u>in a consecutive alignment</u> in the channel, the plurality of pulley rotors forms a group, and the plurality of pulley rotors include a first pulley rotor and a second pulley rotor;

wherein each of the at least two lifting cords entrain about the group as a whole in a circuitous fashion such that each of [[the]] <u>the at</u> least two lifting cords repeatedly entrains about the group at least two laps; and

wherein the at least two lifting cords entrain about the first pulley rotor[[s]] at least twice.

71. (Currently amended) The system of claim 70, wherein the at least two lifting cords are stored on the group of pulley rotors in a circuitous fashion such that each of the least two lifting cords entrain about the second pulley rotor[[s]] at least twice.

72. (Original) The system of claim 71, wherein the first pulley rotor is disposed at one terminal end of the group of pulley rotors, and the second pulley rotor are disposed at an opposite terminal end of the group of pulley rotors, and wherein the consecutive alignment is a linear alignment, such that the plurality of pulleys aligns in a substantially straight line.

73. (Currently amended) The system of claim 72, wherein the at least two lifting cords entrain[[s]] about the group at least three laps, and wherein the at least two lifting cords are coupled to the spring motor via at least one connecting cord.

OBJECTION TO THE DRAWINGS UNDER 37 CFR 1.83(A)

The Final Office Action dated September 25, 2007 objected the drawings, argued that the drawings did not show the second secondary line as recited in claim 61. Without wishing to

disclaim limitations in claim 61, the applicant is in favor of helping to expedite the appeal process, and does not wish to amend the drawings for elements claimed in claim 61. For this simple reason, the applicant wishes to cancel claim 61. Entry of this claim cancellation would make this objection moot.

The Final Office Action dated September 25, 2007 objected the drawings, argued that the drawings did not show the multiple laps as recited in claims 70-73. The applicant respectfully disagrees. An embodiment of the multiple laps is at least shown in drawing figures 17 and 18. In figure 17, two lifting cords entrain about a group of pulley rotors (1, 2, 3, and 5) in multiple laps. And the two lifting cords entrain about pulley rotors 1 and 5 twice in figure 17.

The Final Office Action dated September 25, 2007 objected the drawings, argued that the drawings did not show fastener 201, which was not recited in the claims but mentioned in the specification. The applicant wishes to delete the numeral indicator 201 from the specification. This proposed amendment was submitted in the Response to Final Office Action dated October 31, 2007, and was not entered by the Office. Entry of this amendment would make this objection moot. No new matter would be entered.

CONCLUSION

Based on the arguments provided above, it is the appellant's position that the rejection to claims should be withdrawn.

Respectfully submitted,

By /Anthony S. King/
Anthony S. King
Registration No. 49,063
August 5, 2008

WPAT, P.C., Intellectual Property Attorneys
2030 Main Street, Suite 1300
Irvine, CA 92614
Telephone (949) 260-4797
Fax (949) 260-4798

VIII. Claims Appendix

50. A collapsible window covering capable of height adjustments, comprising:

an upper elongated support having a longitudinally extending channel;

a collapsible member coupled to said upper elongated support;

a lower elongated member coupled to said collapsible member;

a first primary line coupled to said lower elongated member and extends through a length of said collapsible member;

a counterbalancing mechanism having a first and second rotary members, and wherein the counterbalancing mechanism is disposed within said longitudinally extending channel;

a first secondary line having a distal end coupled to said first primary line and a proximal end leading into said counterbalancing mechanism;

a pulley assembly having a first rotor and a second rotor wherein said first primary line is entrained about said first and second rotors; and

wherein said counterbalancing mechanism has a spring coupled to said first rotary member thereby urging said first rotary member to rotate in a winding direction to wind and store said first secondary line onto said first rotary member.

51. The collapsible window covering of claim 50, wherein said pulley assembly is disposed within said longitudinally extending channel.

52. The collapsible window covering of claim 51, wherein the first and second rotors in the pulley assembly is capable of supplementing a counterbalancing effect created by said counterbalancing mechanism, said first and second rotors of said pulley assembly further comprises receiving surfaces for entraining the first primary line, and wherein an arrangement of the receiving surfaces and the number of rotors allows a portion of the first primary line to change its direction of travel at least once before exiting the longitudinally extending channel,

when the lower elongated member is manually pulled in a downward direction to lower the height of the lower elongated member.

53. The collapsible window covering of claim 52, wherein the arrangement of the receiving surfaces and the number of rotors allows a portion of the first primary line to change its direction of travel at least twice before exiting the longitudinally extending channel, when the lower elongated member is manually pulled in a downward direction when lowering the height of the lower elongated member.

54. The collapsible window covering of claim 53, wherein the pulley assembly further comprises a third and a fourth rotor.

55. The collapsible window covering of claim 54, wherein the spring is an S-shaped spring.

56. The collapsible window covering of 55, wherein said first rotary member and said second rotary member are capable of entraining said first secondary line in a criss-cross pattern to assist the spring in providing a counter balancing force.

57. The collapsible window covering of claim 56 further comprising a second primary line coupled to said first secondary line such that movement of said first secondary line also moves said first and second primary line evenly, thereby keeping said bottom elongated member level.

58. The collapsible window covering of claim 53, wherein rotation of said first rotary member in said winding direction are capable of entraining and winding said first secondary line; and wherein the spring is an s-shaped spring also coupled to the second rotary member.

59. The collapsible window covering of claim 57, wherein the collapsible member includes pleated shade.

60. The collapsible window covering of claim 57, wherein the collapsible member includes shutter such as Venetian blinds, and comprises a plurality of blind slats.

61. The collapsible window covering of claim 58 further comprising a second secondary line having a proximal end leading into said counterbalancing mechanism, said second secondary line having a distal end coupled to said first primary line and coupled to a second primary line such that the second secondary line work alongside said first secondary line to ensure adequate

strength in suspending a weight of the collapsible covering and a weight of the lower elongated member, and wherein the counterbalancing mechanism is disposed at a terminal end in the longitudinally extending channel.

62. A method of raising a collapsible window covering without using a manual pull cord, said method comprising:

Providing a collapsible window covering comprising an upper elongated support having a longitudinally extending channel, a collapsible member coupled to said upper elongated support, a lower elongated member coupled to said collapsible covering, a least two primary lines coupled to said lower elongated member and extends through a length of said collapsible covering, a secondary line coupled to said at least two primary lines and to a counterbalancing mechanism, a pulley assembly having a first and second rotors wherein at least one of said at least two primary lines is entrained about said first and second rotors, and wherein said counterbalancing mechanism is disposed within said longitudinally extending channel and has a spring coupled to a first rotary member thereby urging said first rotary member to rotate in a winding direction to wind and store said secondary line onto said first rotary member;

manually lift the lower elongated member in an upward direction to allow said collapsible member to shorten in a longitudinal direction; and

wherein lifting the lower elongated member allows the at least two primary lines to move evenly without entangling with each other on the first rotary member.

63. The method of claim 62, wherein the spring is an S-shaped spring.

64. The method of claim 63, wherein bouncing of the bottom elongated member is minimized by entraining the at least two primary lines about the first and second rotors of the pulley assembly, thereby increasing stability of the bottom elongated member and increasing precision in height position adjustment of the bottom elongated member.

65. The method of claim 64, wherein the counterbalancing mechanism further includes a second rotary member capable of entraining said secondary line.

66. The method of 65, wherein said secondary line is entrained about said first rotary member and said second rotary member in a criss-cross pattern to assist the spring in providing a counter balancing force.

67. A window covering system capable of height adjustments, comprising:

an upper elongated support having a longitudinally extending channel;

a collapsible member coupled to said upper elongated support;

a lower elongated member coupled to said collapsible member;

a first primary line and a second primary line coupled to said lower elongated member and extends through a length of said collapsible member;

a counterbalancing mechanism having at least two rotary members, wherein the two rotary members are a first, and a second rotary members, and wherein the counterbalancing mechanism is disposed within said longitudinally extending channel;

a secondary line having a proximal end leading into said counterbalancing mechanism;

a pulley assembly having at least four rotors, wherein each of said first and second primary line is entrained about at least two of said at least four rotors; and

wherein said counterbalancing mechanism has at least one s-shaped spring coupled to said second rotary member thereby urging said second rotary member to rotate in a winding direction to wind and store said secondary line onto said second rotary member.

68. The window covering system of claim 67, wherein the two primary lines and the secondary line are coupled to form a 2-into-1 configuration that resembles a English letter Y.

69. The window covering system of claim 67, wherein the two primary lines and the secondary line are coupled via a connector piece, such that when the secondary line moves in and out of the counterbalancing mechanism, the primary lines also moves in and out of the pulley assembly.

70. A cordless window covering system, comprising:

an upper elongated support having a longitudinal channel;

a lower elongated member;

a collapsible window covering member coupled to said lower elongated member;

a spring motor disposed at a terminal end in the channel and is capable of providing counterbalancing force to counterbalance a weight of the lower elongated member and a weight of the collapsible window covering member, at various heights of the lower elongated member;

at least two lifting cords each having a distal end coupled to the lower elongated member, and each of said lifting cords passes through the collapsible window covering member and into the channel, and the lifting cords are coupled to the spring motor;

a pulley assembly having a plurality of pulley rotors aligned consecutively in the channel, the plurality of pulley rotors forms a group, and the plurality of pulley rotors include a first pulley rotor and a second pulley rotor;

wherein each of the at least two lifting cords entrain about the group as a whole in a circuitous fashion such that each of the least two lifting cords repeatedly entrains about the group at least two laps; and

wherein the at least two lifting cords entrain about the first pulley rotors at least twice.

71. The system of claim 70, wherein the at least two lifting cords are stored on the group of pulley rotors in a circuitous fashion such that each of the least two lifting cords entrain about the second pulley rotors at least twice.

72. The system of claim 71, wherein the first pulley rotor is disposed at one terminal end of the group of pulley rotors, and the second pulley rotor are disposed at an opposite terminal end of the group of pulley rotors, and wherein the consecutive alignment is a linear alignment, such that the plurality of pulleys aligns in a substantially straight line.

73. The system of claim 72, wherein the at least two lifting cords entrains about the group at least three laps, and wherein the at least two lifting cords are coupled to the spring motor via at least one connecting cord.

IX. Evidence Appendix

Declaration under § 1.132 signed by Mr. Crous Swart was submitted to the USPTO on April 10, 2007, and was entered and considered by the Examiner as indicated on the Final Office Action dated September 25, 2007.

Declaration under § 1.132 signed by Mr. Li-Ming Cheng was submitted to the USPTO on April 10, 2007, and was entered and considered by the Examiner as indicated on the Final Office Action dated September 25, 2007.

Declaration under § 1.132 signed by Mr. ChingHo Chao was submitted to the USPTO on April 10, 2007, and was entered and considered by the Examiner as indicated on the Final Office Action dated September 25, 2007.

Declaration under § 1.132 signed by Mr. Jerry Zerg was submitted to the USPTO on July 07, 2007, and was entered and considered by the Examiner as indicated on the Final Office Action dated September 25, 2007.

Copies of the above four Declarations are attached herein with the Appeal Brief.

X. Related Proceedings Appendix

None.